

ABSTRACT

An embodiment of the invention includes an efficient error-control system and method for recovering packet losses, especially losses in distributing multicast video over broadband residential networks. Preferably, unlike most existing error-control algorithms designed for Internet multicast, the system and method does not employ substantial feedback suppression. Preferably, the system and method does not employ substantial multicasted retransmission. Preferably, the system and method does not employ substantial parity retransmission. Preferably, the system and method does not employ substantial local loss recovery. The system and method integrates two existing classes of error-control algorithms: Automatic Repeat Request (ARQ) and Forward Error Correction (FEC), to reduce traffic overhead and achieve scalability.